

Listing of the Claims:

1. (Previously Presented) A microphone unit for interfacing with a two way analog radio, said microphone unit comprising:

a microphone for receiving an audible input and converting said audible input into an analog electrical signal;

a digitizer coupled to said microphone for creating a digital signal from said analog electrical signal;

a voice coding device coupled to said digitizer for creating a voice coded signal from said digital signal;

an encryption module coupled to receive said voice coding signal for encrypting said voice coded signal to generate an encrypted signal; and

a modulator coupled to receive said encrypted signal for generating an analog output signal capable of being received by a two way analog radio; and

a cable operatively connected to said modulator and adapted for detachable connection to said two way analog radio to provide said analog output signal to said two way analog radio.

2. (Canceled)

3. (Previously Presented) The microphone unit as set forth in claim 1, further comprising an amplifier circuit coupled between said microphone and said digitizer for amplifying said electrical signal and providing said amplified electrical signal to said digitizer.

4. (Canceled)

5. (Previously Presented) The microphone unit as set forth in claim 1, wherein said cable comprises a plug for connecting to a jack of said two way analog radio.

6. (Previously Presented) The microphone unit as set forth in claim 1, wherein said encryption module comprises software for encrypting said voice coded signal.

7. (Original) The microphone unit as set forth in claim 6, wherein said encryption module further comprises memory for storing an encryption key.

8. (Previously Presented) The microphone unit as set forth in claim 1, wherein said voice coding device is an AMBE+ vocoder.

9. (Original) The microphone unit as set forth in claim 1, wherein said encryption is AES encryption.

10. (Previously Presented) The microphone unit as set forth in claim 1, further comprising:

a demodulator for receiving an output analog signal from an analog radio and demodulating said signal into a voice coded signal;

decryption means coupled to said demodulator for decrypting said voice coded signal to generate a decrypted voice coded signal;

a voice decoding device coupled to said decryption means for generating a digital voice signal from said decrypted voice coded signal;

a digital to analog converter coupled to said voice decoding device for converting said digital voice signal to an analog voice signal; and

a speaker coupled to said digital to analog converter for outputting said analog voice signal.

11. (Previously Presented) A microphone unit for interfacing with a two way analog radio, said microphone unit comprising:

a cable adapted for detachable connection to said two way analog radio to provide an encrypted analog signal from said two way analog radio to said microphone unit;

a demodulator for receiving said encrypted analog signal from said analog radio and demodulating said signal into a digital voice coded signal;

decryption means coupled to said demodulator for decrypting said voice coded signal to generate an decrypted voice coded signal;

a voice decoding device coupled to said decryption means for generating a digital voice signal from said decrypted voice coded signal; and

a digital to analog converter coupled to said voice decoding device for converting said digital voice signal to said analog electrical signal; and

a speaker for converting said analog electrical signal to an audio signal.

12. (Canceled)

13. (Previously Presented) The microphone unit as set forth in claim 11, further comprising an amplifier circuit coupled between said digital to analog converter and said speaker for amplifying said analog electrical signal and providing said amplified signal to said speaker.

14. (Canceled)

15. (Previously Presented) The microphone unit as set forth in claim 11, wherein said cable comprises a plug for connecting to a jack of said two way radio.

16. (Previously Presented) A microphone unit as set forth in claim 11, wherein said decryption module comprises software for decrypting said voice coded signal.

17. (Previously Presented) A microphone unit as set forth in claim 11, wherein said decryption module further comprises memory for storing an decryption key.

18. (Previously Presented) The microphone unit as set forth in claim 11, wherein said voice decoding device is an AMBE+ vocoder.

19. (Original) The microphone unit as set forth in claim 11, wherein said decryption is AES decryption.

20. (Previously Presented) A method for providing a secure audio signal input to a two way analog radio, comprising the steps of:

providing a voice input to a microphone contained within a microphone unit to create an analog electrical signal;

digitizing said analog electrical signal within said microphone unit to create a digital voice signal;

voice coding said digital voice signal to create a voice coded signal;

encrypting said voice coded signal to create an encrypted signal; and

modulating said encrypted signal to create an analog output signal;

connecting the microphone unit to said two way analog radio using a detachable cable;

providing the analog output signal to the two way analog radio via the cable; and

wirelessly transmitting an analog output broadcast signal.

21. (Original) A method as set forth in claim 20, further comprising the step of:

amplifying said analog electrical signal before said digitizing step.

22. (Previously Presented) A method for receiving a secure analog signal from a two way analog radio and converting said signal into audible speech, comprising the steps of:

connecting the microphone unit to an interface on said two way analog radio using a detachable cable;

wirelessly receiving a secure analog broadcast signal.

providing the secure analog signal from the two way analog radio via the cable;

demodulating said secure analog signal from said analog radio to create an encrypted voice coded signal;

decrypting said encrypted voice coded signal to create a digital voice coded signal;

voice decoding said digital voice coded signal to create a decoded voice signal;

converting said decoded voice signal to an analog voice signal; and

converting said analog voice signal to an audio signal via a speaker.

23. (Original) A method as set forth in claim 18, further comprising the step of:
amplifying said analog voice signal prior to outputting via said speaker.

24. (Previously Presented) A method for secure communication among analog two way radios comprising the steps of:

providing a voice input to a microphone contained within a microphone unit to create an analog electrical signal;

digitizing said analog electrical signal within said microphone unit to create a digital voice signal;

voice coding said digital voice signal to create a voice coded signal;

encrypting said voice coded signal to create an encrypted signal;

modulating said encrypted signal to create a first analog output signal, wherein said first analog output signal can be received by a two way radio via a microphone input contained within said radio;

connecting the microphone unit to an interface on said first two way analog radio using a detachable cable;

providing said analog output signal to a first two way analog radio via the cable;

transmitting an analog broadcast signal by said first two way radio;

connecting a second microphone unit to an interface on said second two way analog radio using a second detachable cable;

receiving said broadcast signal by a second two way radio and outputting a second analog output signal representative of said broadcast signal;

providing said second analog output signal from the second two way analog radio to a second microphone unit via the second cable;

demodulating said second output signal to create an encrypted voice coded signal;

decrypting said encrypted voice coded signal to create a digital voice coded signal;

voice decoding said digital voice coded signal to create a decoded voice signal;

converting said decoded voice signal to an analog voice signal; and

converting said analog voice signal to an audio signal via a speaker.

25. (Previously Presented) The microphone unit as set forth in claim 1, further comprising said two way analog radio detachably connected to said cable.

26. (Previously Presented) The microphone unit as set forth in claim 11, further comprising said two way analog radio detachably connected to said cable.